

California Department of Fish and Game
Marine Resources Operations
California State Fisheries Laboratory
Terminal Island, California

Cruise Reports 61S4, 61S5, 61M1, 61M2 - Abalone

Vessels: N. B. SCOFIELD
MOLLUSK

Dates: Departed from San Pedro August 7, 1961 > 61S4 and 61M1
Returned to San Pedro August 20, 1961
Departed from San Pedro August 30, 1961 > 61S5 and 61M2
Returned to San Pedro September 10, 1961

Locality: Channel Islands of Santa Catalina, Santa Barbara, San Clemente, San Nicolas, Santa Cruz, Santa Rosa, San Miguel and Anacapa and off the mainland at Pt. Loma.

Purpose: 1. To examine areas of commercial abalone diving.
2. To examine established stations.
3. To tag black abalone, Haliotis cracherodii, for growth and movement studies in cooperation with Santa Barbara Museum.
4. To collect and photograph species of abalone

Results: All of the Channel Islands were visited and areas where commercial diving had been conducted were examined. The southern islands and the mainland at Pt. Loma were checked during the first cruise period and the northern islands were visited during the second. In general, most legal sized abalone appeared to have been well harvested. Pink abalones, H. corrugata, on the southwest side of San Clemente Island showed evidence of new and rapid growth. The kelp, Macrocystis, in this area and around the other islands, is quite thick. Recovery of the kelp is still continuing and at San Nicolas Island it has returned in greater concentrations than before the warm-water years.

On the northeast side of Santa Cruz Island the red abalone, H. rufescens, was the dominant species in certain areas. During previous explorations in the same general areas the pink abalone, H. corrugata, was the dominant species.

Examination of the island stations revealed that considerable changes have been taking place. The most striking was the marked decrease in the numbers of abalone as compared with the last inspection in 1960. At the Catalina stations almost all the abalones have either died (there were great numbers of empty shells of all sizes scattered over the bottom of the station areas) or have disappeared. It is also believed that these areas have been heavily fished for abalone.

In cooperation with the Santa Barbara Museum, approximately 150 black abalones were tagged on Santa Rosa Island for growth, movement, and longevity studies.

Still and moving pictures were taken in black and white and in color of activities of the investigation and of the species of abalone taken. These photographs are to be used for publications and study.

Personnel: R. B. Mitchell - Captain, N.B. SCOFIELD
K. Cox - Biologist in charge
G. Bickford - Diver-Deckhand
W. Thomas - Diver-Deckhand
V. Peckham - Seasonal Aid 8/7 to 8/20
R. Eberhardt - Lockheed Corp. (guest)
P.C. Orr - Santa Barbara Museum (guest)

